

## REMARKS/ARGUMENTS

The preceding amendments and following remarks are submitted in response to the non-final Office Action mailed September 10, 2003, setting a three-month shortened statutory period for response ending December 10, 2003. Reconsideration, examination and allowance of all pending claims are respectfully requested.

On pages 2-5 of the Office Action, the Examiner restricted Applicants' invention into two groups, namely, Group I drawn to a filter system, classified in class 606, subclass 200; and Group II drawn to a method for retrieving an intravascular filter from a body lumen, classified in class 604, subclass 49. According to the Examiner, restriction is proper since the process as claimed can be practiced with another materially different product, and since the claimed filter system and methods "have acquired a separate status in the art as shown by their different classification.

In addition to imposing a two-way restriction, the Examiner further states that the Application contains claims directed to twenty-one patentably distinct species of the claimed invention. The Examiner states that Applicants are required to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable, pursuant to 35 U.S.C. § 121. According to the Examiner, there are currently no generic claims.

In an interview with the Examiner on August 13, 2003, a provisional election was made without traverse to prosecute the invention of Group I, Species 1 (claims 1-4, 6-7, 10-11, and 17-18). Pursuant to 37 C.F.R. § 1.146, Applicants elect, without prejudice, Group I, Species 1 (Figures 1-2) for prosecution on the merits.

On page 5 of the Office Action, the Examiner rejected claims 1-3 and 6 under 35 U.S.C. § 102(b) as being anticipated by *Cathcart et al.* (U.S. Patent No. 6,165,179). The Examiner states that *Cathcart et al.* disclose a filter system comprising a wire having a proximal end and a distal end, a filter for collecting debris from a body lumen, an outer shaft, and a dilator tip slidably disposed in the distal sheath and movable between a distally advanced position and a proximally retracted position. With respect to claim 2, the Examiner states that *Cathcart et al.* disclose a dilator tip comprising a generally circular cross-section and a conical shaped distal portion. Moreover, with respect to claim 3, the Examiner states that *Cathcart et al.* disclose a “resilient inner shaft 17” disposed in the outer shaft 13.

In response to the Examiner’s rejection of claim 1, Applicants have amended that claim to now recite:

1. (Currently Amended) A filter system, comprising:
  - a wire having a proximal end and a distal end;
  - a filter for collecting debris from a body lumen, said filter being disposed proximal of the distal end of said wire;
  - an outer shaft having a proximal end, a distal end, and a distal sheath extending distally thereof;
  - a dilator tip slidably disposed in the distal sheath and movable between a distally advanced position located at least in part beyond the distal sheath, and a proximally retracted position.

As can be seen above, claim 1 now recites that the dilator tip is moveable between a distally advanced position located at least in part beyond a distal end of the distal sheath, and a proximally retracted position. The actuation of the dilator tip between these two positions can be clearly seen in Figures 1-2 of the present Application, which illustrate the retrieval of a filter (22) using the dilator tip (28).

Unlike the filter system recited in claim 1, nothing in the *Cathcart et al.* reference discloses or suggests a dilator tip moveable between a distally advanced position located at least

in part beyond the distal sheath, and a proximally retracted position. In *Cathcart et al.*, element 20 referred to by the Examiner as a dilator tip comprises a metal segment having a substantially smooth inner bore that contacts several hook portions (24) disposed on the proximal end (22) of a vena cava filter (23). *See* Figure 3. In use, the metal segment (20) prevents the hook portions (24) from damaging the outer tubular member (13) during transport of the vena cava filter (23) through the body. As the vena cava filter (23) is ejected from within the outer tubular member (13), the metal segment (20) is displaced between a first position located proximal to the distal end (15) of the outer tubular member (13) (*see* Figure 3) to a second position located at or near the distal end (15) of the outer tubular member (13) (*see* Figures 4-5). A stop (33) disposed on the distal end (15) of the outer tubular member (13) prevents the metal segment (20) from being advancing distally beyond the outer tubular member (13).

While *Cathcart et al.* disclose a metal segment (20) for use in preventing damage to the outer tubular member (13), nothing in that reference discloses or suggests a dilator tip movable between a distally advanced position located at least in part beyond the distal sheath, and a proximally retracted position. Indeed, *Cathcart et al.* appear to disclose that the metal segment (20) is not moveable at least in part beyond the outer tubular member (13), specifically disclosing the use of a stop (33) to prevent such movement. Since nothing in *Cathcart et al.* discloses or suggests a dilator tip slidably disposed in a distal sheath and movable between a distally advanced position located at least in part beyond the distal sheath, and a proximally retracted position, Applicants respectfully assert that claim 1 is patentable over the *Cathcart et al.* reference. Because independent claim 1 is patentable, dependent claims 2-3 and 6 are also patentable for the reasons stated above, and since they add significant elements to distinguish them from the prior art.

With respect to the rejection of claim 2, Applicants further submit that the metal segment (20) in *Cathcart et al.* does not have a conical shaped distal portion, but instead has a substantially tubular shape along its length. The shape of the metal segment (20) can be clearly seen in Figure 3 of *Cathcart et al.*, which shows the metal segment (20) having a substantially tubular shape with a reduced outer diameter portion at its leading edge (32).

On page 6 of the Office Action, the Examiner rejected claims 4 and 17-18 under 35 U.S.C. § 103(a) as being unpatentable over *Cathcart et al.* (U.S. Patent No. 6,165,179) in view of *Cassell et al.* (U.S. Patent No. 5,827,324). The Examiner states that *Cassell et al.* disclose a distal portion formed of a coil encapsulated in a polymeric material. According to the Examiner, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of *Cathcart et al.* by including a spring coil inside a polymeric material to provide a stiffening member with contraction and extension forces.

As discussed previously, independent claim 1 of the present application now recites a dilator tip slidably disposed in a distal sheath and movable between a distally advanced position located at least in part beyond the distal sheath, and a proximally retracted position. Independent claim 17 similarly recites a dilator tip slidably disposable along a filter wire at least in part distally of a distal sheath. Claims 4 and 18 depend, respectively, from independent claims 1 and 17, and therefore further recite a dilator tip having such features.

For reasons similar to that stated above, Applicants respectfully assert that it would not have been obvious to modify *Cathcart et al.* in view of *Cassell et al.* to arrive at Applicants claimed invention of claims 4 and 17-18. As discussed above, nothing in *Cathcart et al.* discloses or suggests a dilator tip slidably disposed along a filter wire at least in part beyond the distal sheath. Instead, *Cathcart et al.* disclose the use of a stop (33) to prevent distal movement

of the metal segment (20) beyond the distal end (15) of the outer tubular member (13). Since nothing in *Cathcart et al.*, alone or in combination with *Cassell et al.* suggests the use of a dilator tip slidably disposed along a filter wire at least in part beyond the distal sheath, Applicants respectfully assert that claims 4 and 17-18 are patentable over the cited prior art.

On page 6 of the Office Action, the Examiner further rejected claims 7 and 10-11 under 35 U.S.C. § 103(a) as being unpatentable over *Cathcart et al.* (U.S. Patent No. 6,165,179) in view of *Tsugita et al.* (U.S. Patent No. 5,911,734). The Examiner states that *Tsugita et al.* disclose a filter system comprising a filter, an elongate member slidably received within a sheath, and a coil spring disposed helically about the elongate member. According to the Examiner, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of *Cathcart et al.* by providing a coil spring around the inner member to provide the sliding motion of the dilator tip.

For similar reasons as discussed above with respect to independent claim 1, Applicants assert that it would not have been obvious to modify *Cathcart et al.* in view of *Tsugita et al.* to arrive at the dilator tip recited in claims 7 and 10-11. As discussed *supra*, nothing in *Cathcart et al.* discloses or suggests a dilator tip slidably disposed in a distal sheath and moveable between a distally advanced position located at least in part beyond the distal sheath, and a proximally retracted position. *Tsugita et al.* similarly fails to disclose this element. Thus, since neither *Cathcart et al.* nor *Tsugita et al.* disclose or suggest the dilator tip recited in independent claim 1, Applicants respectfully assert that dependent claims 7 and 10-11, which depend from claim 1, are in condition for allowance.

In an interview with the Examiner on October 2, 2003, an inquiry was made into whether the Office Action mailed on September 10, 2003 was final, as is indicated by a check mark in

box 2(a) of the Office Action Summary sheet. During the interview, the Examiner stated that the Office Action Summary sheet is incorrect, and should properly indicate that the Office Action is non-final. Accordingly, Applicants have filed this Amendment under the provisions of 37 C.F.R. § 1.111 governing non-final amendments.

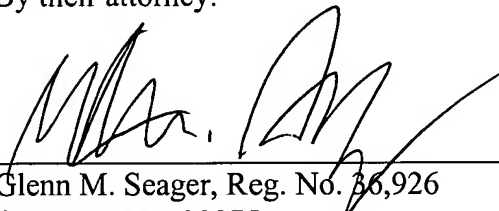
In view of the foregoing, all pending claims are believed to be in condition for allowance. Reexamination and reconsideration are respectfully requested. If the Examiner would like to discuss the application or its examination in any way, please call the undersigned attorney at (612) 677-9050.

Respectfully Submitted,

JOSEPH GARNER ET AL.

By their attorney:

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